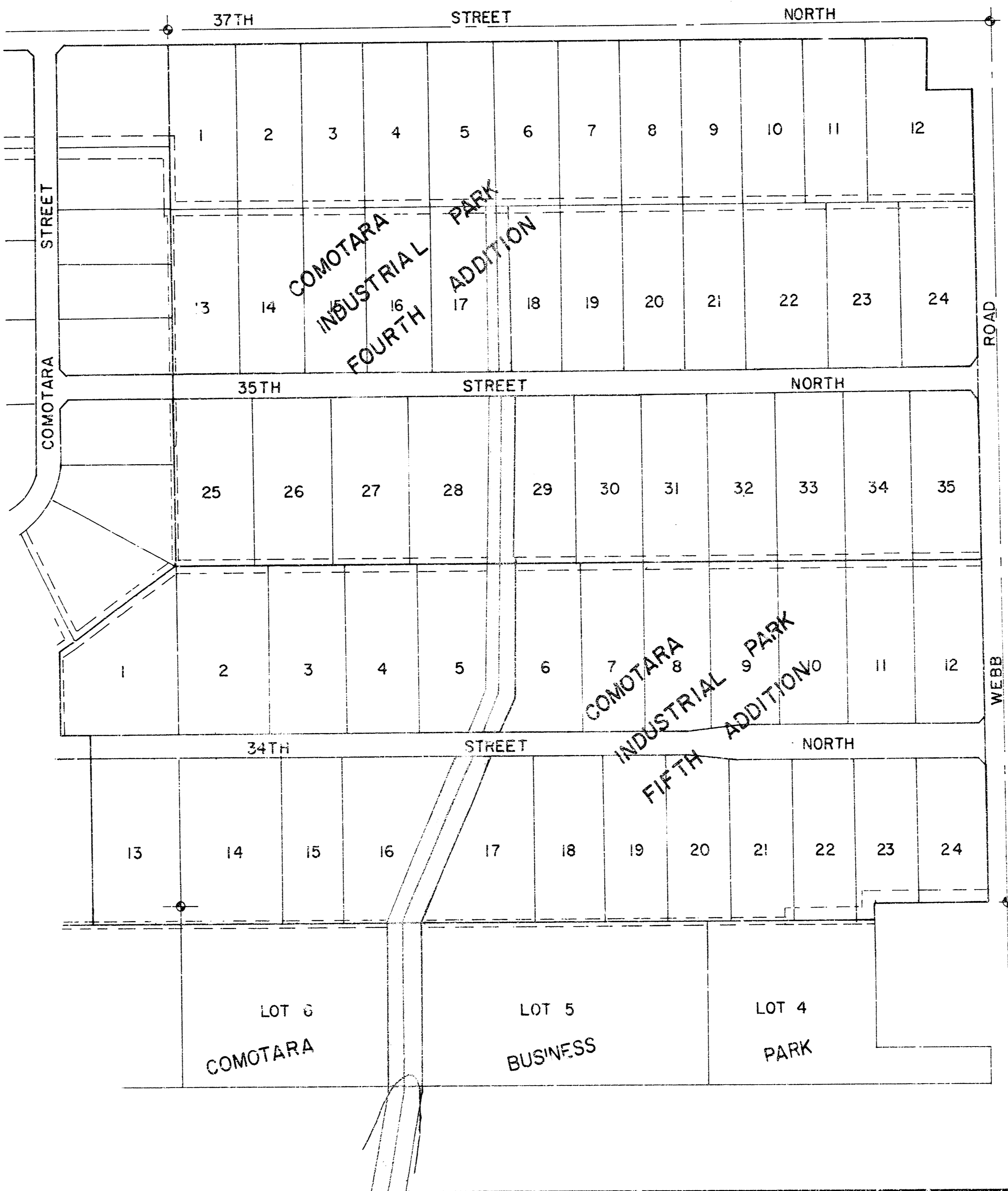


S.W.D. NO. 20

STORM CHANNEL IN COMOTARA INDUSTRIAL PARK

PROJECT NO.
468-76-245-80170-000-000-001
CITY OF WICHITA, KANSAS
R.W. LINN CITY ENGINEER

- GENERAL NOTES:**
1. Excess excavated material to be disposed of on adjacent site as directed by developer, developer's engineer or site engineer.
 2. FLOOD CONTROL SHALL MAINTAIN A 100 YEAR FLOOD CAPACITY OF 100 CFS. ALL EXISTING STRUCTURES SHALL BE REPLACED TO ORIGINAL LOCATION AND CONDITION.

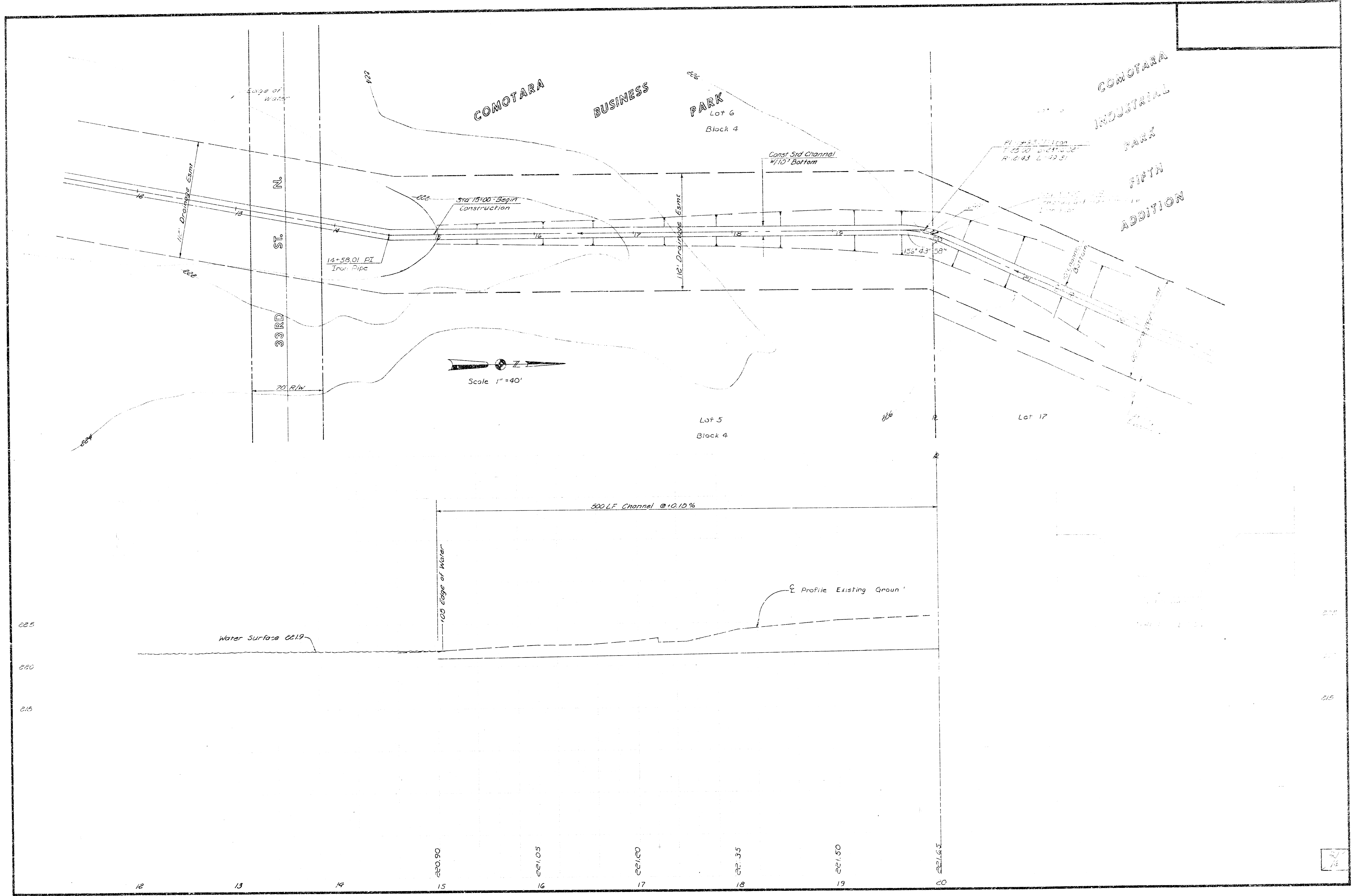


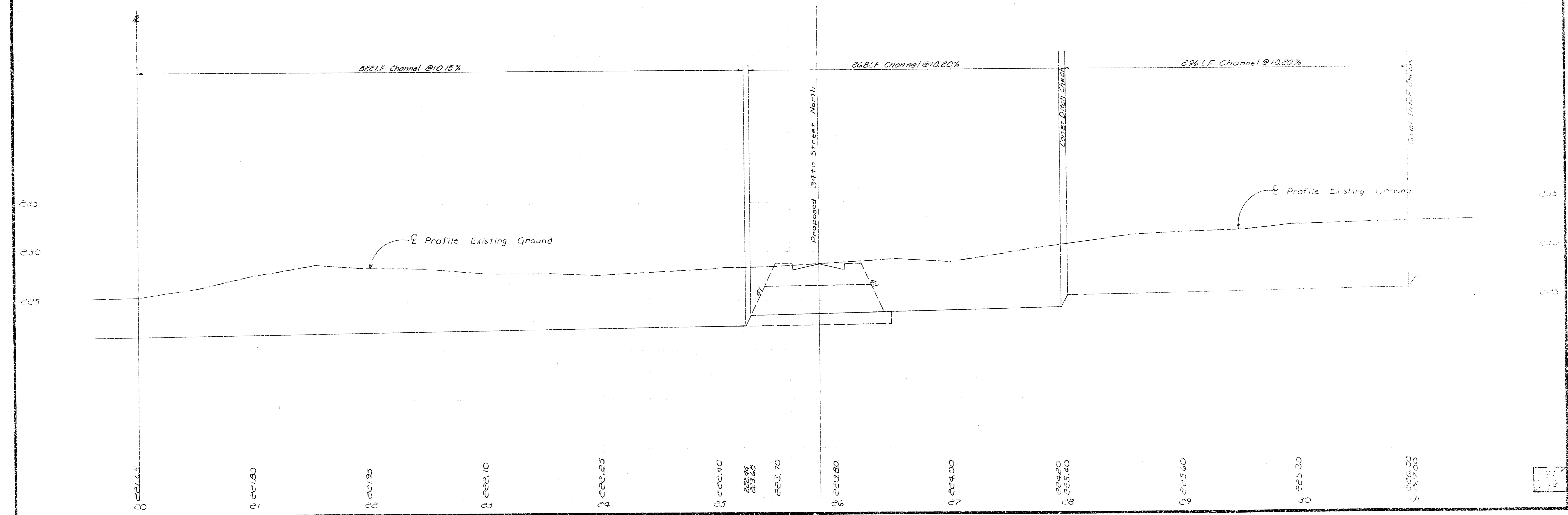
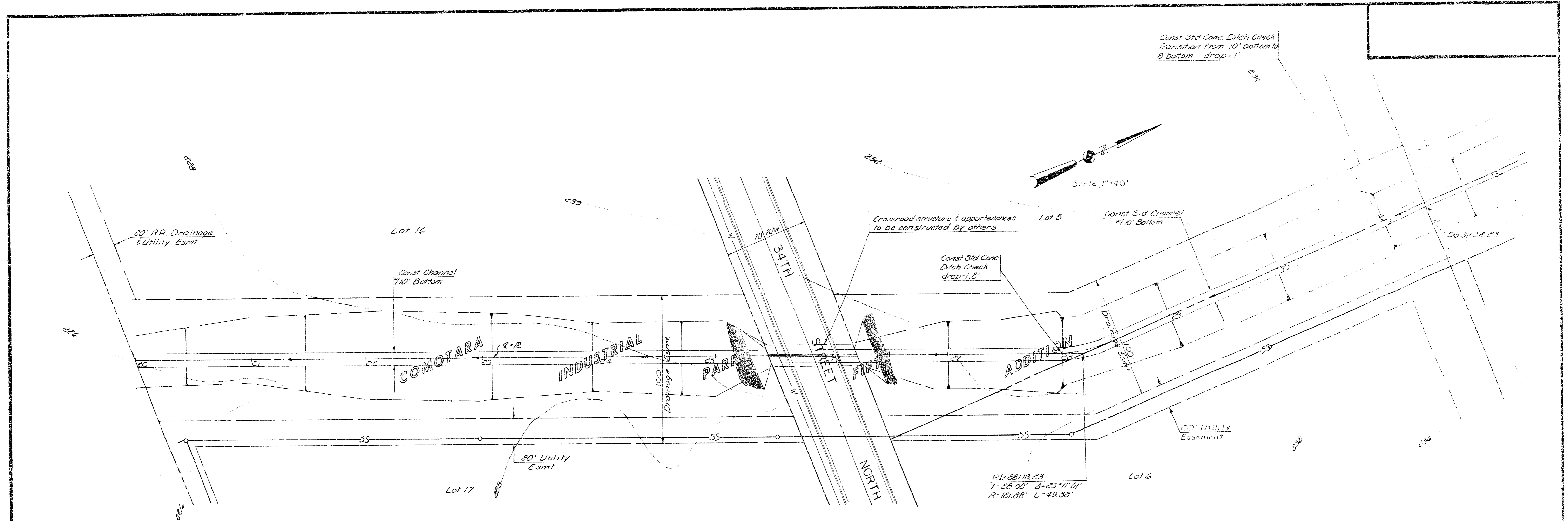
INDEX TO DRAWINGS

- 1 TITLE SHEET
- 2-4 PLAN & PROFILE
- 5 DITCH DETAILS
- 6 HEADWALL DETAIL
- 6a SOIL SAVER DETAIL
- 7-11 CROSS SECTIONS

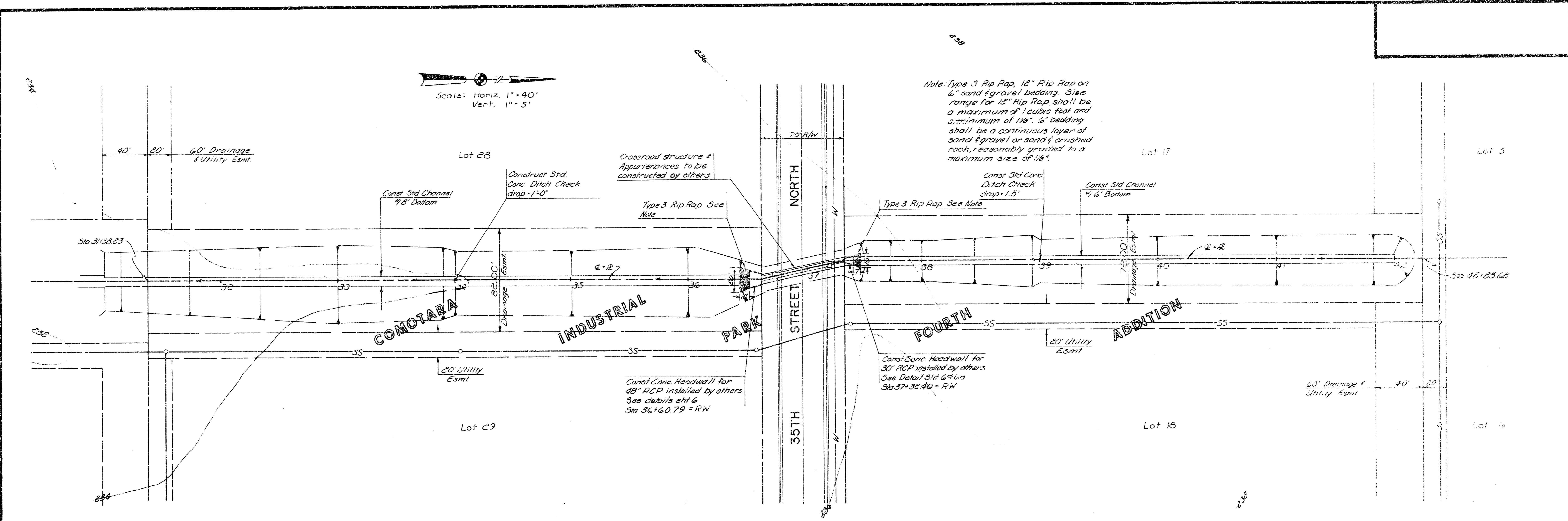
Amended by [Signature]

VAN DOREN - HAZARD - STALLINGS ARCHITECTS - ENGINEERS - PLANNERS 300 N. W. 10th St. WICHITA, KANSAS	SHEET 1 OF 1
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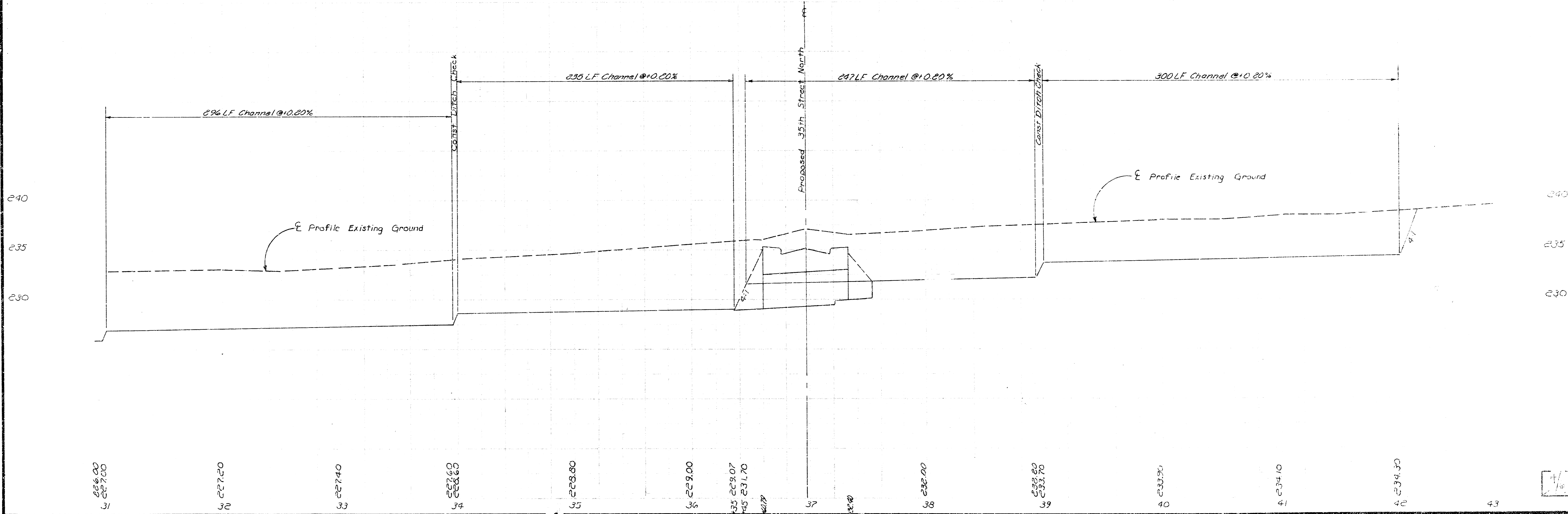




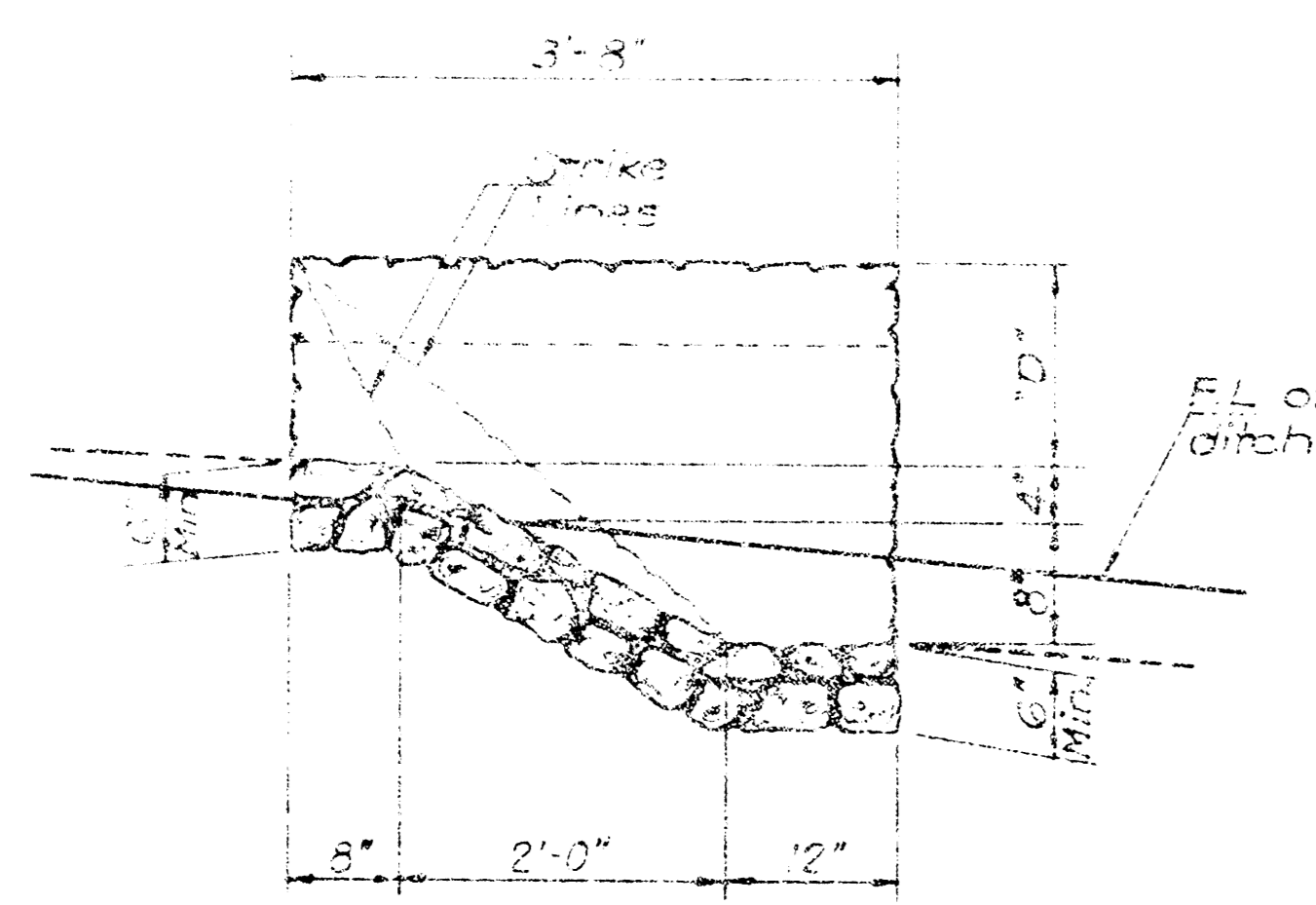
Scale: Horiz. 1" = 40'
Vert. 1" = 5'



Note: Type 3 Rip Rap, 12" Rip Rap or 6" sand & gravel bedding. Size range for 12" Rip Rap shall be a maximum of 1 cubic foot and a minimum of 1/16". 6" bedding shall be a continuous layer of sand & gravel or sand & crushed rock, reasonably graded to a maximum size of 1/8".

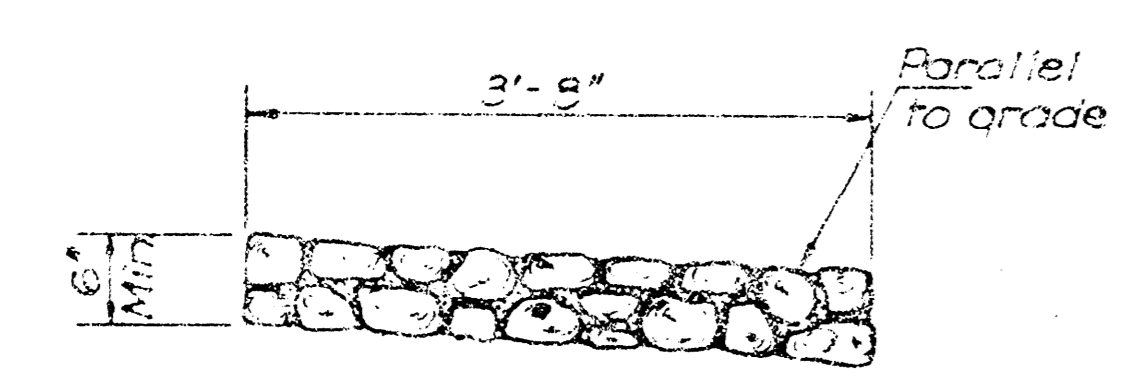


1/15



GROUDED STONE
TYPE I

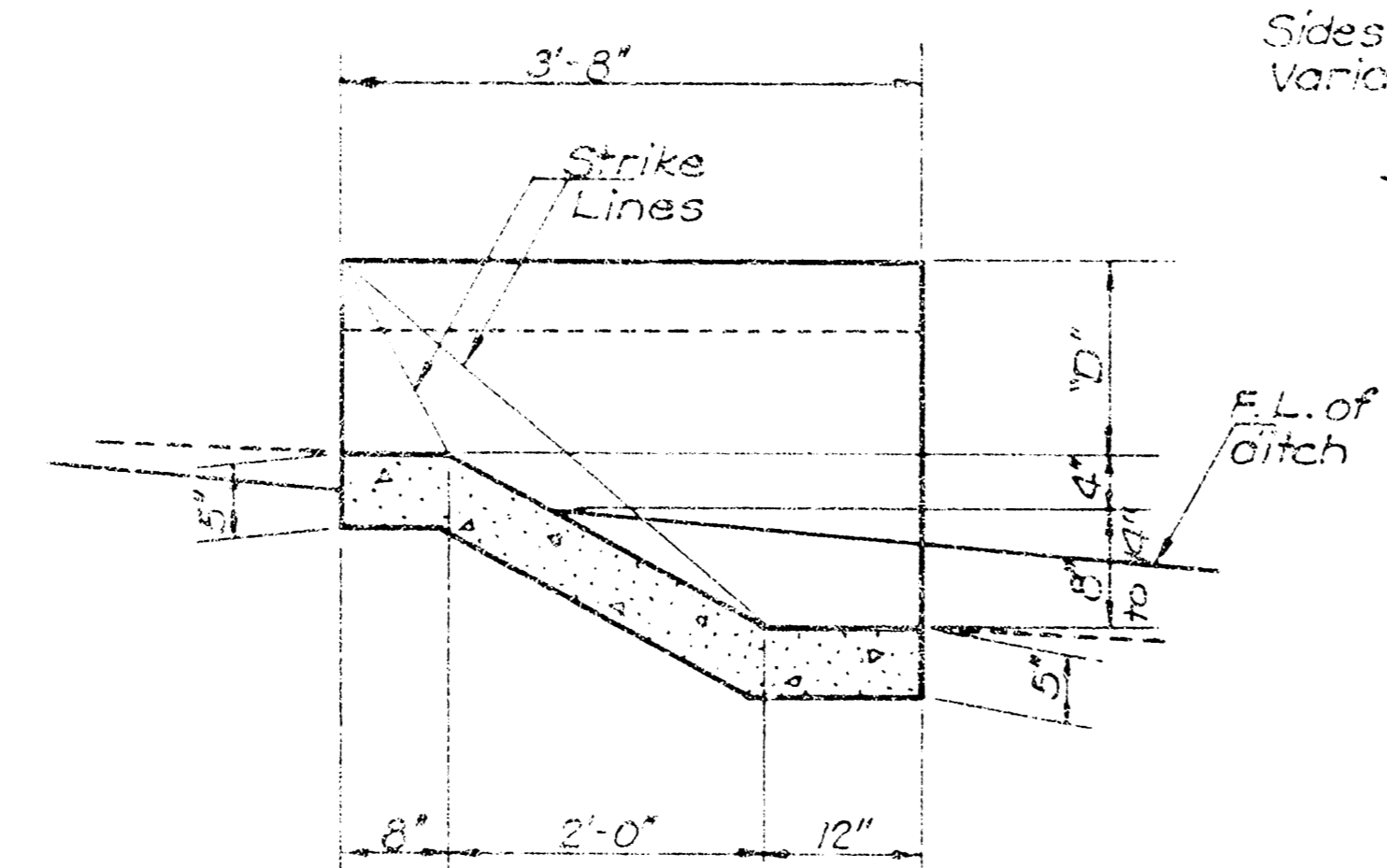
SECTION A-A
Without Toe Wall.



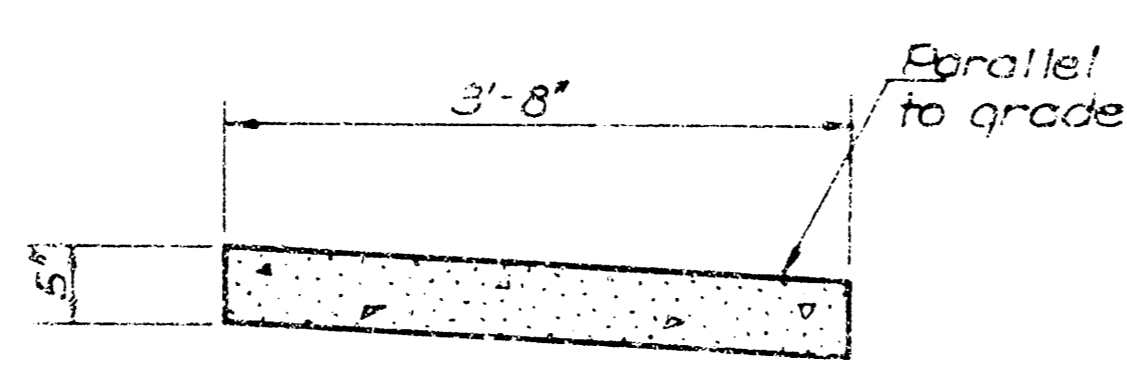
GROUDED STONE
TYPE I

SECTION B-B
Same section at each
end of unit.
Without Toe Wall.

Note: The stone in all stone wash checks shall be laid in a 3" mortar bed and the spaces between stones shall be filled with mortar.



CONCRETE
TYPE 2



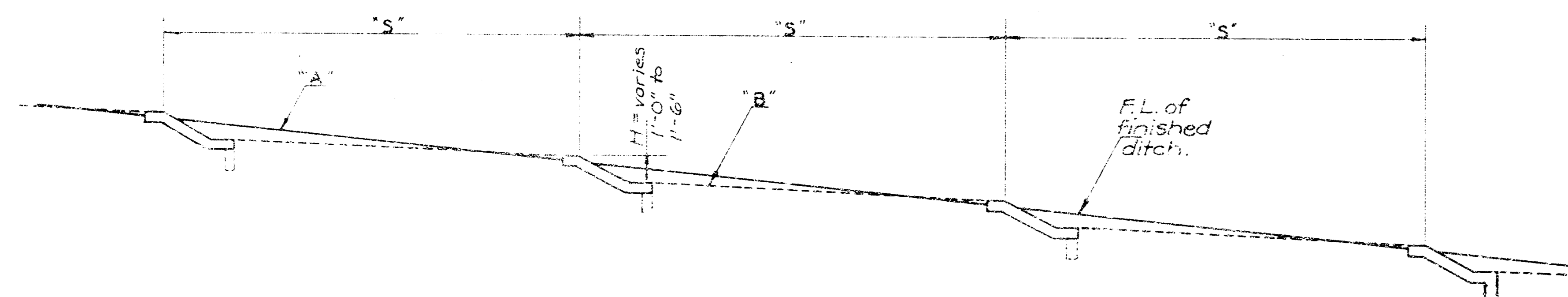
CONCRETE
TYPE 2

Note: Use Class 'A' concrete thruout for Type 2 & 5-T Wash Checks.

Sideslope Variable

E.L. of ditch

Parallel to grade



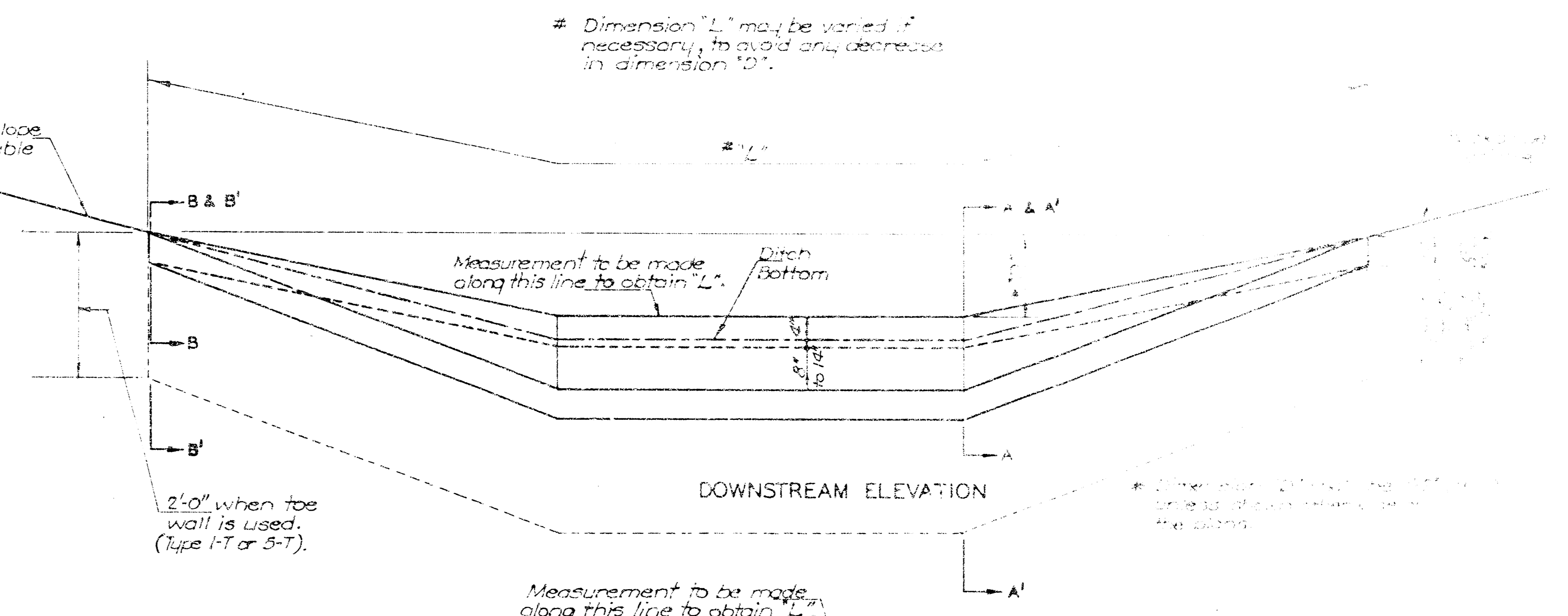
SPACING DIAGRAM
Same for each type.

- S = Spacing of units in feet (10' min.).
- A = Percent grade of ditch.
- B = Percent at which washing is expected to stop. This will vary with the type of soil, etc.
- H = Height of drop at each unit.

$$S = \frac{100H}{(A-B)} \text{ (1.0' min.)}$$

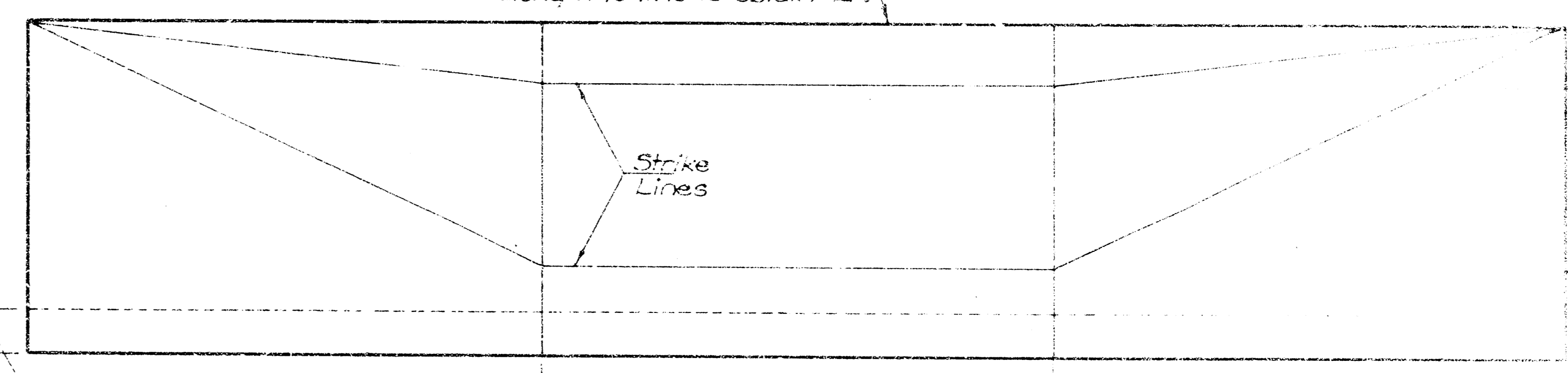
FORMULA

TABLE OF SPACING Same for each type			
(A-B)	Spacing	(A-B)	Spacing
1	100'	6	17'
1.5	67'	6.5	15.5'
2	50'	7	14'
2.5	40'	7.5	13'
3	33'	8	12.5'
3.5	29'	8.5	12'
4	25'	9	11'
4.5	22'	9.5	10.5'
5	20'	10	10'
5.5	18'		



DOWNSTREAM ELEVATION

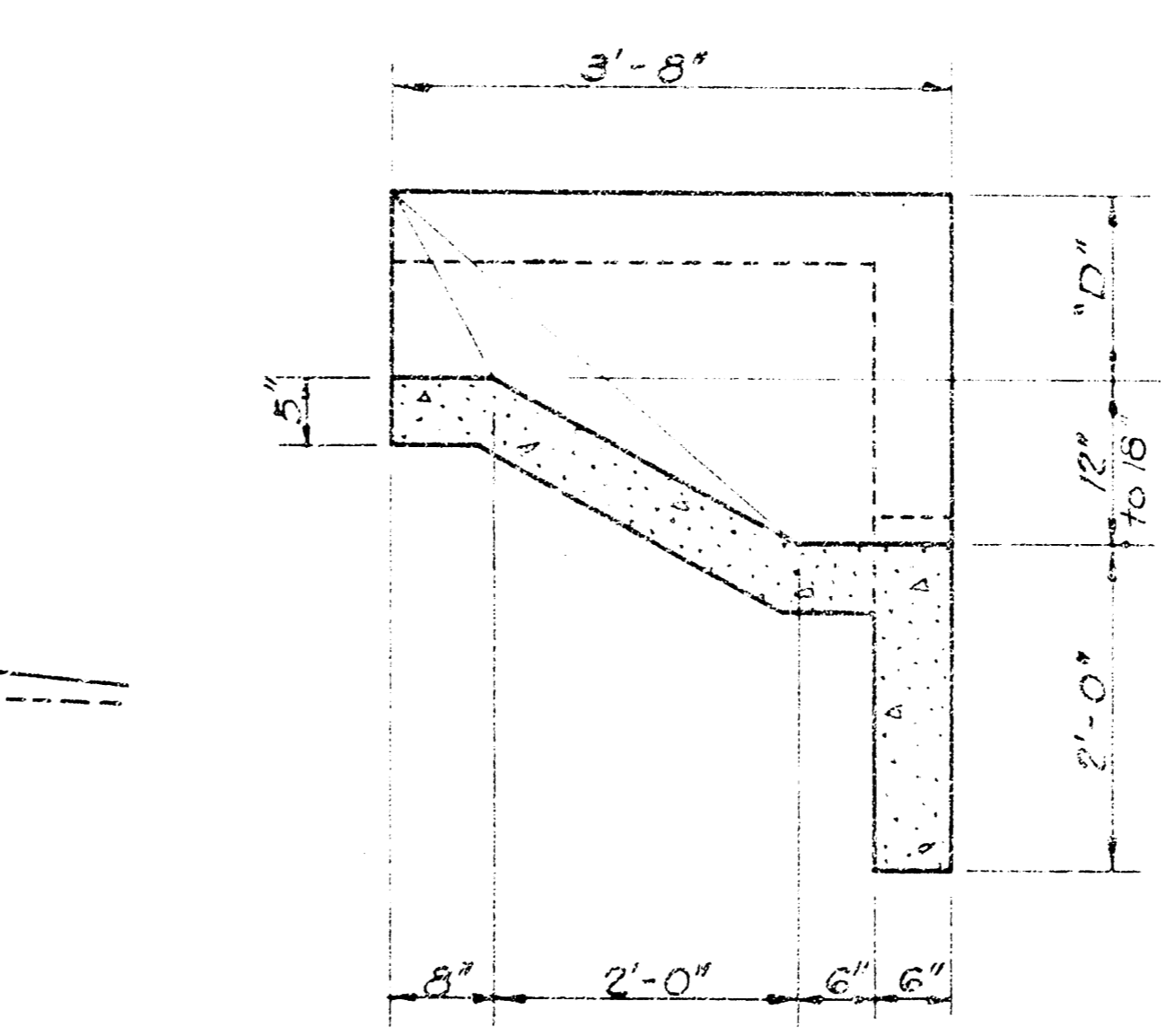
Measurement to be made along this line to obtain "L".



PLAN

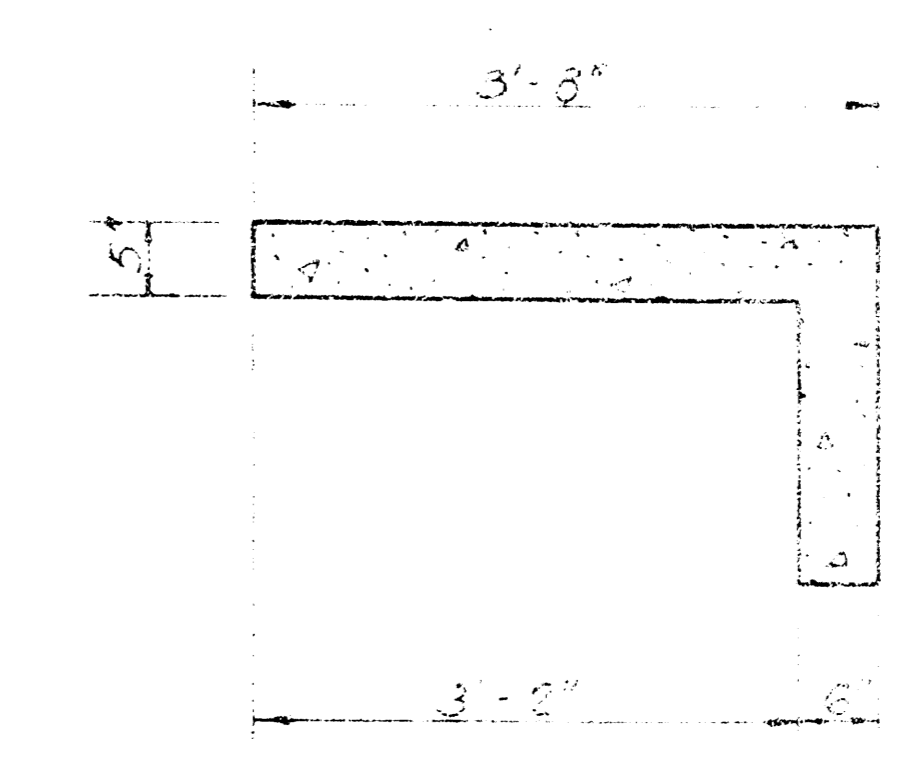
Dimension "L" is the length of ditch as shown on the plan.

6" when toe wall is used. (Type 1-T or 5-T).



SECTION A'-A'
With Toe Wall
TYPE 2-T

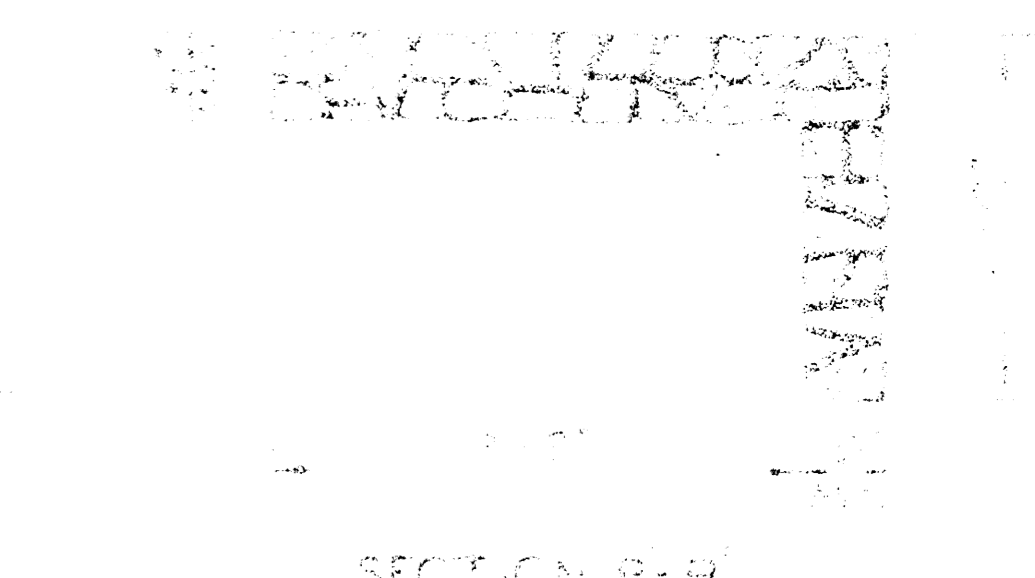
Note: Type 1-T or 5-T wash checks shall be used on the lowest unit in each row. Additional locations where these units are to be constructed shall be designated by the Engineer.



SECTION B'-B'
With Toe Wall
TYPE 2-T

Parallel to grade

Parallel to grade



SECTION B-B
TYPE 1-T

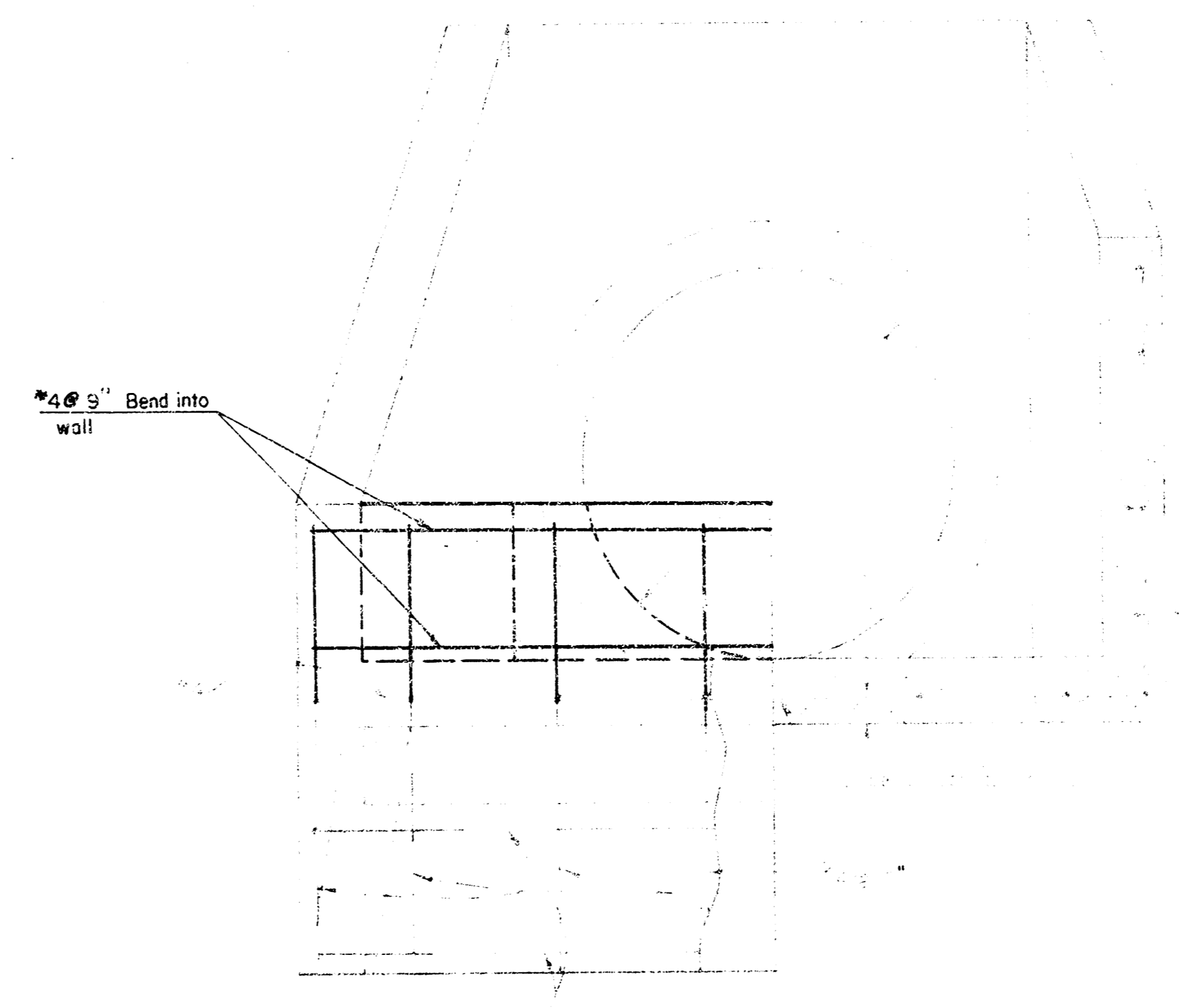
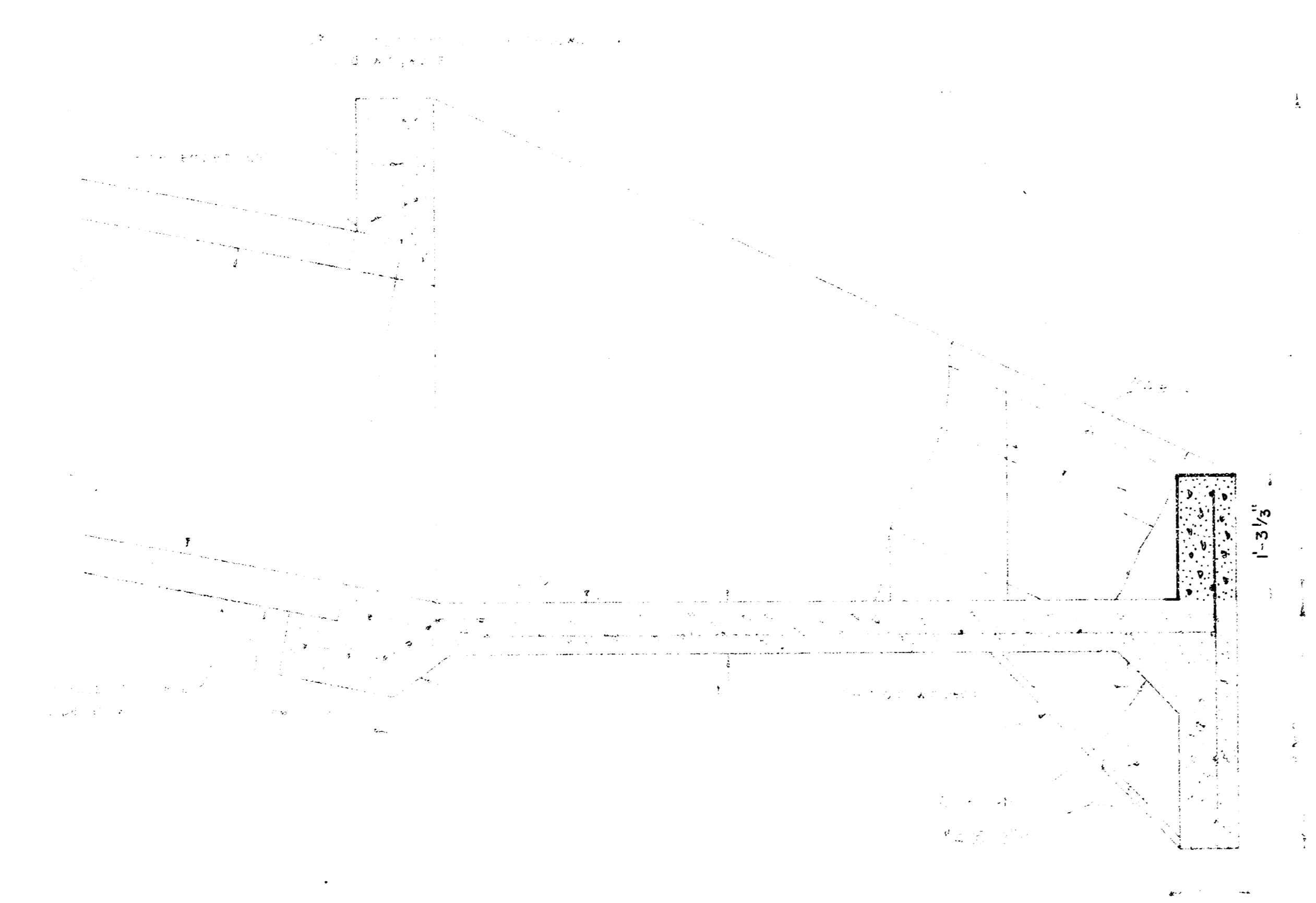
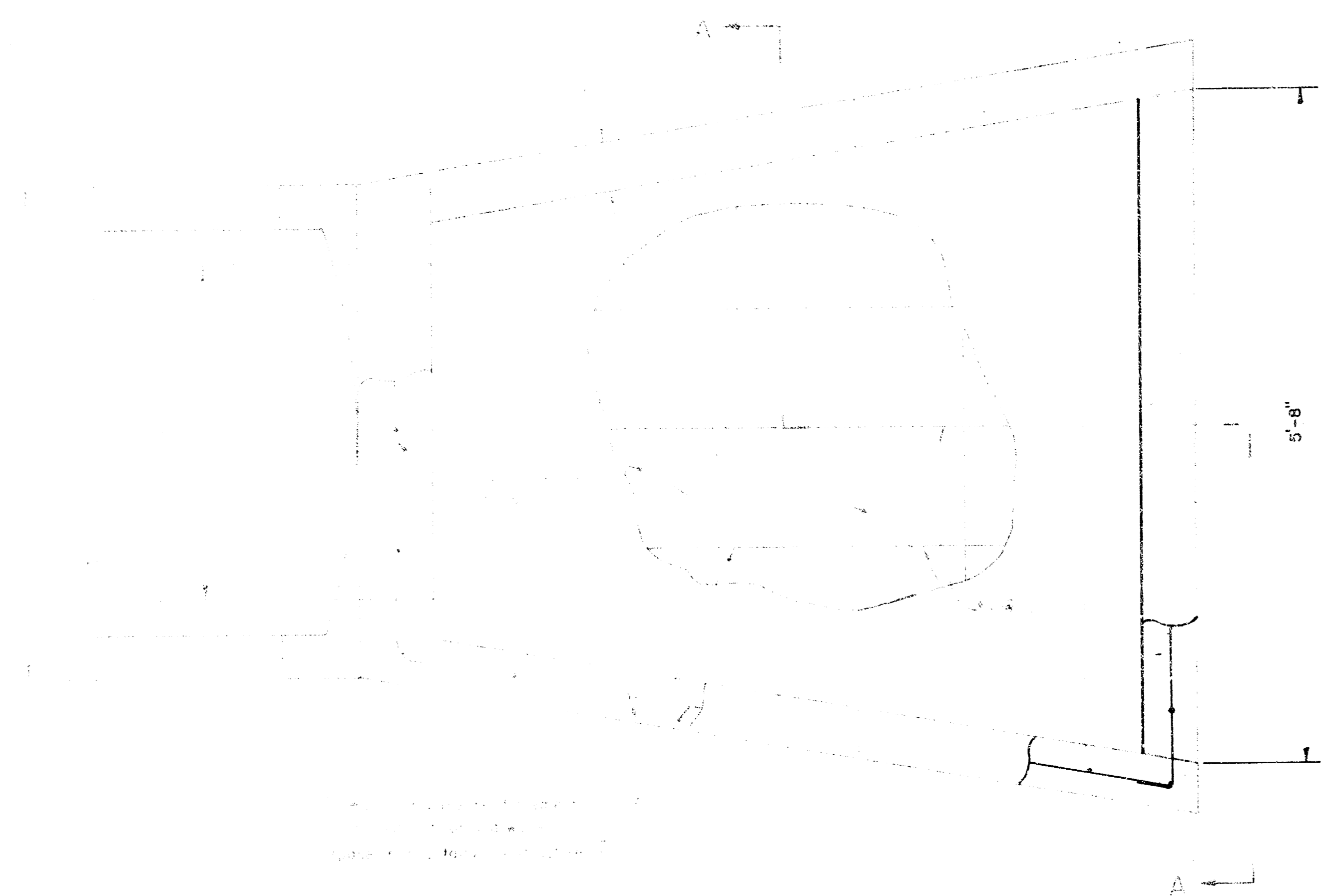
Note: These units are to be used only where they are shown on the plan.

KANSAS DEPARTMENT OF TRANSPORTATION

WASH CHECKS
TYPE 1 & TYPE 2

STD. NO. 506

5



SECTION A-A

K.H.B. FEB. 79 78-226	SOIL SAVER FOR R.C. CULVERT	
	11	